

WE CLAIM:

1 1. A method of treating an iron overload disease
2 comprising administering to a patient an HFE polypeptide
3 having the sequence of SEQ ID NO:1 wherein the HFE polypeptide
4 is provided in a complex with full length, wild type human
5 β_2m .

1 2. A composition comprising an HFE polypeptide
2 having the amino acid sequence of SEQ ID NO:1 wherein the HFE
3 polypeptide is provided in a complex with full length, wild
4 type human β_2m .

3 3. A method of treating an iron deficiency disease
4 comprising administering to a patient an HFE polypeptide
5 having the sequence of SEQ ID NO:2 wherein the HFE polypeptide
6 is provided in a complex with full length, wild type human
7 β_2m .

1 4. A composition comprising an HFE polypeptide
2 having the amino acid sequence of SEQ ID NO:2 wherein the HFE
3 polypeptide is provided in a complex with full length, wild
4 type human β_2m .

5 5. A method of treating an iron deficiency disease
6 comprising administering to a patient an HFE polypeptide
7 having the sequence of SEQ ID NO:3 wherein the HFE polypeptide
8 is provided in a complex with full length, wild type human
9 β_2m .

1 6. A composition comprising an HFE polypeptide
2 having the amino acid sequence of SEQ ID NO:3 wherein the HFE
3 polypeptide is provided in a complex with full length, wild
4 type human β_2m .

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